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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,580

06/25/2003

Robert T. Bailey III

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11/19/2004

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EXAMINER

LUK, LAWRENCE W

ART UNIT

PAPER NUMBER

2838

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/603,580	<b>Applicant(s)</b> BAILEY, ROBERT T.	
	<b>Examiner</b> Lawrence W Luk	<b>Art Unit</b> 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14-21 is/are rejected.
- 7) ☒ Claim(s) 7, 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/11; 10/14/03</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8, 11-12, 14, 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnaud et al. (5,412,268) in combination with Pfaeffle (6,000,721) and Montague (5,868,404).

As to claims 1 and 11, Arnand et al. disclose in figure 5b, 1a, a generator and battery charging unit for use on a wheeled apparatus, comprising: A. a generator (see figure 5b) having a rotor (see figure 1a) and a stator (see figure 1a), said generator comprising (in column 2, lines 25-43) at least a first phase winding (E2, E4); B. (see column 1, lines 57-66) a rotatable shaft extending from the rotor in communication with a wheel on the apparatus; but fails to teach a charging base for holding a rechargeable battery, said charging base being electrically connected with said first phase winding; and wherein, upon rotation of the wheel on the wheeled apparatus, the wheel is operable to transfer torque to the shaft in communication with the wheel, said shaft being rotatable with the rotor relative to the stator to produce a first winding current in the first phase winding, said first winding current being operable to charge the rechargeable battery in the charging base.

Pfaeffle disclose in figure 4A, 6, column 4, lines 3-10, a charging base (unit 172) for holding a rechargeable battery (unit 76R), said charging base (unit 172) being electrically connected with said first phase winding.

Montague disclose in column 2, lines 18-35, wherein, upon rotation of the wheel on the wheeled apparatus, the wheel is operable to transfer torque to the shaft in communication with the wheel, said shaft being rotatable with the rotor relative to the stator to produce a first winding current in the first phase winding, said first winding current being operable to charge the rechargeable battery in the charging base.

It would have been obvious to person having ordinary skill in the art at the time of the invention was made to modify the device of Arnaud et al. to include a charging base for holding a rechargeable battery, said charging base being electrically connected with said first phase winding as taught by Pfaeffle and upon rotation of the wheel on the wheeled apparatus, the wheel is operable to transfer torque to the shaft in communication with the wheel, said shaft being rotatable with the rotor relative to the stator to produce a first winding current in the first phase winding as taught by Montague for braking system which translates kinetic energy from the skaters momentum into energy.

As to claims 2 and 18, Arnaud et al in view of Pfaeffle and Montague are applied supra, and Pfaeffle further disclose in figure 4A, the charging base (unit 172) comprises a receptacle adapted to receive one or more of the rechargeable batteries (unit 76R).

As to claims 3 and 19, Arnaud et al in view of Pfaeffle and Montague are applied supra, and Arnaud further disclose in column 4, lines 15-27, a rectifier connected with the receptacle and the generator to supply DC power to the receptacle.

As to claims 4 and 20, Arnaud et al in view of Pfaeffle and Montague are applied supra, and Pfaeffle further disclose in figure 1, column 1, lines 39-45, column 3, lines 19-22, an electrical terminal in communication with the receptacle ( unit 74, see column 3, lines 65-67) for supplying electrical power to an accessory (headlight, brake light, sidelight).

As to claims 5 and 21, Arnaud et al in view of Pfaeffle and Montague are applied supra, and Arnaud further disclose in column 4, lines 6-31, a rectifier connected with the electrical terminal to supply DC power to the electrical terminal.

As to claims 6 and 12, Arnaud et al in view of Pfaeffle and Montague are applied supra, and Arnaud further disclose in column 4, lines 45-60, the generator comprises a second phase winding operable to produce a second winding current.

As to claims 8 and 14, Arnaud et al in view of Pfaeffle and Montague are applied supra, and Pfaeffle further disclose in column 2, lines 3-15, the second phase winding is electrically connected with a lighting element.

As to claim 16 and 17, Arnaud et al in view of Pfaeffle and Montague are applied supra, and Montague further disclose in column 5, line 38 to column 6, line 6, an engagement lever operably connected to and displaceable with the shaft, said lever being movable to an engaged position in which the shaft communicates with the wheel, and a disengaged position in which the shaft is positioned out of communication with

the wheel and wherein said lever is moveable to the engaged position to move the shaft into frictional engagement with the wheel and is moveable to the disengaged position to move the shaft out of frictional engagement with the wheel.

3. Claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnaud et al. (5,412,268) in combination with Pfaeffle (6,000,721) and Montague (5,868,404) as discussed above, and further in combination with Chien (5,876,108).

As to claims 9 and 15, Arnaud et al. Pfaeffle and Montague discloses the elements as claimed, except for the lighting element comprises a plurality of LEDS configured for mounting on the wheeled apparatus.

Chien disclose in column 1, lines 42-63, the lighting element comprises a plurality of LEDS configured for mounting on the wheeled apparatus.

It would have been obvious to person having ordinary skill in the art at the time of the invention was made to modify the device of Arnaud et al. Pfaeffle and Montague to include the lighting element comprises a plurality of LEDS configured for mounting on the wheeled apparatus as taught by Chien for lighting arrangement of the type which can safely be used on a variety of vehicles.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arnaud et al. (5,412,268) in combination with Pfaeffle (6,000,721) and Montague (5,868,404) as discussed above, and further in combination with Engel et al. (4,896,105).

As to claim 10, Arnaud et al. Pfaeffle and Montague discloses the elements as claimed, except for the generator comprises a stepper motor.

Engel et al. disclose in column 5, lines 11-13, the generator comprises a stepper motor.

It would have been obvious to person having ordinary skill in the art at the time of the invention was made to modify the device of Arnaud et al. Pfaeffle and Montague to include the generator comprises a stepper motor as taught by Engel et al. for the AC electric load based on the rotation of the output shaft of the stepper motor.

#### ***Allowable Subject Matter***

5. Claims 7 and 13 are objected to as being dependent upon a rejected base claim. The prior art of record fails to teach or reasonably suggest that at least one of the first and second phase windings is electrically connected with an output jack.

Claims 7 and 13 would be allowable if rewritten in independent from including all of the limitations of the base claim.

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LWL  
November 12, 2004

*Lawrence Hub*  
*examiner*  
*11/12/04*